CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A method, comprising:

detecting a faulty portion of memory in a computer system during an operating system runtime, the faulty portion having stored a system software component in a system software memory region of memory; and

relocating the system software component from the faulty portion of memory to a safe portion of memory.

2.   (Original) The method of claim 1 wherein the system software component includes instructions loaded from a firmware device during a pre-boot phase of the computer system that persist into an operating system runtime of the computer system.

3.   (Original) The method of claim 1 wherein relocating the system software component comprises:

finding the safe portion of memory within the system software memory region;

moving the system software component to the safe portion of memory; and

updating a system software memory manager to indicate the system software component is located at the safe portion of memory.

4.   (Original) The method of claim 1 wherein relocating the system software component comprises:

finding the safe portion of memory within the memory of the computer system;

moving the system software memory region to the safe portion of memory; and

resetting a base address for the system software memory region.

5.   (Original) The method of claim 1 wherein the system software memory region comprises System Management Random Access Memory (SMRAM).

6.   (Original) The method of claim 1 wherein the system software memory region comprises a firmware reserved region of memory of the computer system.

7.   (Original) The method of claim 1, further comprising setting a memory error detector during a pre-boot phase of the computer system.

8.   (Original) The method of claim 1, further comprising determining a memory address of the faulty portion.

9.   (Original) The method of claim 1, further comprising marking the faulty portion as unusable.

10.   (Previously Presented) An article of manufacture comprising:
     a tangible machine-readable medium including a plurality of instructions which when executed perform operations comprising:
     detecting a faulty portion in a system software memory region of a computer system during an operating system runtime of the computer system, the system software memory region having stored system software for the computer system; and
     relocating the system software from the faulty portion to a safe portion of memory of the computer system during operating system runtime.

11.	(Original) The article of manufacture of claim 10 wherein relocating the system software comprises:

finding the safe portion of memory;

moving a portion of system software to the safe portion of memory; and

indicating the portion of system software is located at the safe portion of memory.

12.	(Original) An article of manufacture of claim 11 wherein indicating the portion of system software is located at the safe portion of memory comprises updating a system software memory manager for the system software memory region to indicate the portion of system software is at the safe portion of memory.

13.	(Original) The article of manufacture of claim 11 wherein the portion of system software comprises an executable image in accordance with a Portable Executable and Common Object File Format (PE/COFF).

14.	(Original) The article of manufacture of claim 10 wherein the system software memory region comprises a System Management Random Access Memory (SMRAM) region.

15.	(Original) The article of manufacture of claim 10 wherein the system software memory region comprises a firmware reserved region, wherein firmware of the computer system to operate in accordance with an Extensible Firmware Interface (EFI) framework standard.

16.	(Original) The article of manufacture of claim 10 wherein execution of the plurality of instructions further perform operations comprising marking the faulty portion of the system software memory region as unusable after relocating the system software.

17. (Original) A computer system, comprising:

a processor;

a memory device operatively coupled to the processor; and

at least one flash device operatively coupled to the processor, the at least one flash device including firmware instructions which when executed by the processor perform operations comprising:

detecting a faulty portion of the memory device during an operating system runtime of the computer system, the faulty portion of the memory device having stored a system software component for the computer system;

determining a location of the faulty portion; and

relocating the system software component from the faulty portion to a safe portion of the memory device during operating system runtime.

18. (Original) The computer system of claim 17 wherein relocating the system software component comprises:

finding the safe portion of the memory device;

moving the system software component to the safe portion; and

updating a system software memory manager to indicate that the system software component is located at the safe portion.

19. (Original) The computer system of claim 17 wherein the system software component includes an executable image in accordance with a Portable Executable and Common Object File Format (PE/COFF).

20. (Original) The computer system of claim 17 wherein the system software component is stored in a System Management Random Access Memory (SMRAM) region of the memory device.

21.   (Original) The computer system of claim 17 wherein the system software component is stored in a firmware reserved region of the memory device.

22.   (Original) The computer system of claim 17 wherein the firmware instructions to operate in accordance with an Extensible Firmware Interface (EFI) framework standard.